Physics 77 Capstone Project Proposal

Overview

* Title of the Research: Simulation of a solar system with animation using matplotlib
* Group members: Yi-Jhan Huang, Ian Chang

Abstract

Our research project is based on the current physical detail of the solar system.

Technical Approach

* Language of programming: mainly python
* Package requirements: matplotlib, numpy

References

* <https://towardsdatascience.com/simulate-a-tiny-solar-system-with-python-fbbb68d8207b>
* <https://thepythoncodingbook.com/2021/12/11/simulating-3d-solar-system-python-matplotlib/>

Proposal Context (One to two paragraphs)

We chose this project generally because recently, as you might’ve known, the James Webb Space telescope sent back marvelous high-resolution images of galaxies, nebulas, black holes, and more. These new images will allow us to have a greater understanding of the history of our universe, recording information about collisions of galaxies and births of stars. Being inspired by this phenomenal event, we’ve decided to use what we’ve learnt in the course and try to simulate a solar system, mainly using the libraries matplotlib and numpy.